REMARKS

Claims 1 and 8 have been amended to recite that the reaction solution obtained in (A) is "an aqueous" reaction solution. Step (B) of Claims 1 and 8 has been amended to recite that the solvent is "an organic" solvent and that the solvent is acetonitrile, toluene, dioxane or dimethylformamide, the substance of Claims 3 and 10. Basis for the limitation "aqueous solution" may be found in Example 1, Step (A) in which the reaction solution formed is clearly an aqueous reaction solution. Step (D) of Claims 1 and 8 has been amended to recite that the crystals have a remaining hydrolyzable chlorine content of at most 100 ppm. Basis for this limitation may be found on page 8, lines 9-15 of the specification. In addition to the amendments discussed above, Claim 8 has been amended to remove from step (B) the phrase "by coating a film of said reaction solution on a substrate and heating". No new matter has been added into the amended claims.

REQUEST FOR RECONSIDERATION

Claims 1, 2, 4-9 and 11-35 are active in the case.

The rejection of Claims 1-35 under 35 U.S.C. § 103(a) as unpatentable over Ikeda et al. in view of Tsukamoto et al. is traversed.

In contrast to the disclosure of Ikeda et al., in which an aqueous reaction solution is formed (See Ikeda et al., Example 1, column 12, lines 19-39) and further processed as an aqueous solution, the present claims recite in step (B) dissolving tris-(2,3-epoxypropyl)-isocyanurate in an organic solvent, which is acetonitrile, toluene, dioxane or dimethylformamide. There is no disclosure of the dissolution of tris-(2,3-epoxypropyl)-isocyanurate in an organic solvent of any type in step (B) of Ikeda et al.

Further, Claims 1 and 8 now contain the limitation that the crystals have a remaining

hydrolyzable chlorine content of at most 100 ppm. (See page 8, lines 9-15 and Examples 1-6 of the specification). The reason that the hydrolyzable chlorine content is at such a low level at the end of the process of the present claims is because in the present invention epichlorohydrin is removed in step (B) and then the tris-(2,3-epoxypropyl)-isocyanurate is dissolved in an organic solvent containing no hydrolyzable chlorine and the organic solvent is specified as acetonitrile, toluene, dioxane or dimethylformamide, which solution then goes through step (C) to obtain crystals of tris-(2,3-epoxypropyl)-isocyanurate. Since the organic solvent used in the present invention contains no hydrolyzable chlorine and is used in the crystallization step, the hydrolyzable chlorine content can be suppressed to a very low value as compared with Ikeda et al. and, further, the remaining organic solvent is also low. Since crystals of tris-(2,3-epoxypropyl)-isocyanurate can be obtained even when a solvent, such as, acetonitrile, toluene, dioxane or dimethylformamide is used in the crystallization step (C), instead of epichlorohydrin, not only is the content of epichlorohydrin in the product of the present invention low, but also the content of the remaining organic solvent, such as, acetonitrile, toluene, dioxane or dimethylformamide is low. Accordingly, the crystals of the present invention can be effectively used in applications in which substantially no hydrolyzable chlorine should be present.

In contrast to the limitation in the claims that hydrolyzable chlorine content be at most 100 ppm, the lowest amount of remaining epichlorohydrin in Ikeda et al. is 130 ppm in Example 5, significantly higher than the limitation in present Claims 1 and 8. Therefore, since the claims, as amended, differ in two important aspects from what is disclosed in Ikeda et al., i.e., the use of an organic solvent in step (B) and a hydrolyzable content of at most 100 ppm in the crystals produced in the process and Tsukamoto et al only discloses an evaporation technique for removing epichlorohydrin from epoxy components, the claims

distinguish over the combination of references.

It is submitted that Claims 1, 2, 4-9 and 11-35 are allowable and such action is respectfully requested.

Respectfully submitted,

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MARKED-UP COPY OF AMENDMENT

IN THE CLAIMS

1. (Twice Amended) A process for producing β-form tris-(2,3-epoxypropyl)-isocyanurate crystals containing from 2 to 15 wt% of α-form tris-(2,3-epoxypropyl)-isocyanurate in the interior of the crystals, consisting essentially of:

(A) reacting cyanuric acid with epichlorohydrin to form an addition product of cyanuric acid and epichlorohyrdrin and dehydrochlorinating said product to obtain [a] an aqueous reaction solution containing tris-(2,3-epoxypropyl)-isocyanurate,

(B) removing epichlorohydrin from said reaction solution and dissolving tris-(2,3-epoxypropyl)-isocyanurate in [a] an organic solvent, wherein said solvent is acetonitrile, toluene, dioxane or dimethylformamide,

(C) gradually cooling the solution of (B) at a cooling rate within 20°C/hr to crystallize tris-(2,3-epoxypropyl)-isocyanurate and filtering to obtain crystals of tris(2,3-epoxypropyl)-isocyanurate, and

(D) washing and drying said crystals, [wherein said solvent is acetonitrile, toluene, dioxane or dimethylformamide] wherein said crystals have a remaining hydrolyzable chlorine content of at most 100 ppm.

3. (Canceled).

8. (Twice Amended) A process for producing β-form tris-(2,3-epoxypropyl)-isocyanurate crystals containing from 2 to 15 wt% of α-form tris-(2,3-epoxypropyl)-

isocyanurate in the interior of the crystals, comprising:

(A) reacting cyanuric acid with epichlorohydrin to form an addition product of cyanuric acid and epichlorohydrin and dehydrochlorinating said product to obtain [a] an aqueous reaction solution containing -(2,3-epoxypropyl)-isocyanurate,

(B) removing epichlorohydrin from said reaction solution [by coating a film of said reaction solution on a substrate and heating] and dissolving tris-(2,3-epoxypropyl)-isocyanurate in [a] an organic solvent, wherein said solvent is acetonitrile, toluene, dioxane or dimethylformamide,

(C) adding seed crystals to the solution of (B) at a temperature lower by from 5 to 20°C than the temperature at which said solution forms a saturated solution, and gradually said cooling solution at a cooling rate within 20°C/hr to crystallize tris-(2,3-epoxypropyl)-isocyanurate, and filtering to obtain crystals of tris-(2,3-epoxypropyl)-isocyanurate, and

(D) washing and drying said crystals, wherein said crystals have a remaining hydrolyzable chlorine content of at most 100 ppm.

10. (Canceled).